

B. V. SKVORTZOV\* and Mitsuzo NODA\*\* : **Xanthophyta novae  
et minus cognitae e Japoniae et Brasiliae**

B. V. スクボルツォフ\*・野田光蔵\*\* : 日本およびブラジル  
より産する黄緑藻 (Xanthophyta) の新種と寡少種

In Japan the material for study was collected by M. Noda in a *Salvinia* pond near Niigata City, in Brasil by the senior author in environs of São Paulo. The description of new species of yellow-green algae are given in Latin.

Abbreviations : N.T. Dedusenko-Stschegoleva and M.M. Hollerbach. Xanthophyta. Moskva, 1962.—D.H. ; São Paulo—S.P. ; Parque do Estado do São Paulo—P.S.P. ; B. Skvortzov—B.S. ; habitat in Latin—Hab.

- Hab. 1. in stagnis inter *Salvinia natans* prope oppidum Niigata, Japan, lg. M. Noda, 5, 5. 1966.
2. inter plantas aquaticis in parte litoralis lacu Belling prope S.P., lg. B.S., 23, 1. 1966.
3. inter *Utricularia* sp. in lacu montanis artificialis, prope Avenida Juitz Washington, S.p., lg. B.S., 10, 8. 1967.
4. in fossa cum aqua pluvialis temporaria inter algas terrestribus prope P.S.P., lg. B.S., 18, 4. 1967.
5. inter radices *Eichhorniae* in stagnis cum aqua fontinalis montanis prope P.S.P., lg. B.S., 8, 1. 1967.
6. in fossa cum pluvialis temporaria inter *Euglena* sp. prope P.S.P., lg. B.S., 28, 12. 1966.
7. in fossa artificialis cum plantas aquaticis in Jardim Botanico Univer-sidad do S.P., lg. Prof. Yumiko Ugadim, botanico et Prof. Leonardo Limmermann, 5, 5. 1963.
8. in fontis montanis cum filamentis *Tribonema* sp. prope P.S.P., lg. B.S., 26, 1. 1967.
9. inter *Salvinia auriculata* in lacu artificialis, P.S.P., lg. B.S., 21, 5. 1963.

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10. in lacu montanis artificialis prope P.S.P., lg. B.S., 8, 12. 1962.

The type specimens were preserved in the Herbarium of Cryptogamic Section of the Botanical Institute of São Paulo, Brasil.

### Description of Species

1. **Chlorocloster nipponica** sp. nov. (Fig. 1)

Cellula fusiformis, asymmetrica, rectis, curvatis vel S-formis cum apicibus attenuatis et acutis plusminus similaribus,  $15-26 \times 5-7.5$  micr.; Chromatophoris 1-2, dilute viridi-flavescens et lateralis; pyrenoidum nullo; nucleus centralis vacuolis adsunt; granulis olei numerosis plerumque infra mediane satis; autosporis 3. Affinis *Chlorocloster raphidioides* Pasch. in D.H. p. 86, fig. 37, 1-3, differ cellulis apicibus brevior, autosporis 3 non 2. Hab. 1.

2. **Chlorocloster salviniae** sp. nov. (Figs. 2, 3)

Cellula brevi fusiformis cum apicibus acutis et similaribus,  $10-11 \times 3.5$  micr.; Chromatophor 1, dilute viridis, uniformis sine pyrenoide; granulis olei plerumque circa nucleus accumulatis. Differt de *Chlorocloster pyreniger* Pasch. in D.H. p. 88, fig. 38, 1-4 in cellulis latior, apicibus brevior et chromatophor sine pyrenoide. Hab. 1.

3. *Monodus coccomyxa* Pasch. in D.H. p. 79, fig. 33, 19-26. (Figs. 4-6).

Cells elongate-ovoid,  $11-16 \times 5-6$  micr.; Chromatophore green, uniform without a pyrenoid. Reported from Europe. Hab. 1.

4. **Polyedriella nasuta** sp. nov. (Fig. 7)

Cellula fronte visa tetragonia vel cruciformis,  $18-20 \times 18-20$  micr., lateribus constrictis, apicibus elongato nasutis; cellula latere visa oblongo depressa, asymmetrica etiam nasutis; Chromatophoris viridis disciformis, periphericis, sine pyrenoide; granulis olei numerosis plerumque mediane satis. Hab. 2.

5. *Ophiocytium parvulum* A. Br. in D.H. p. 206, fig. 102, 1-4. (Figs. 8-10)

Cells single, free C-curved with rounded ends.  $74 \times 3.7-4-9.2$  micr., some cells are capitate enlarged. Hab. 3, 4, 5.

6. **Ophiocytium saupaulensis** sp. nov. (Fig. 11)

Cellula libere natantes et non affixa, subovata vel elongata,  $9-15-21 \times 4.5-6-7$  micr., cum parte anteriore late rotundatis et capitatis; parte posteriore gradatim angustior, brevi acutis cum spina recta et tenuissima,  $3-5$  micr. lg.; membrana brunnea; chromatophoris 1-4-6 in numero, viridis vel viridio-flavescens et periphericis. Hab. 5.

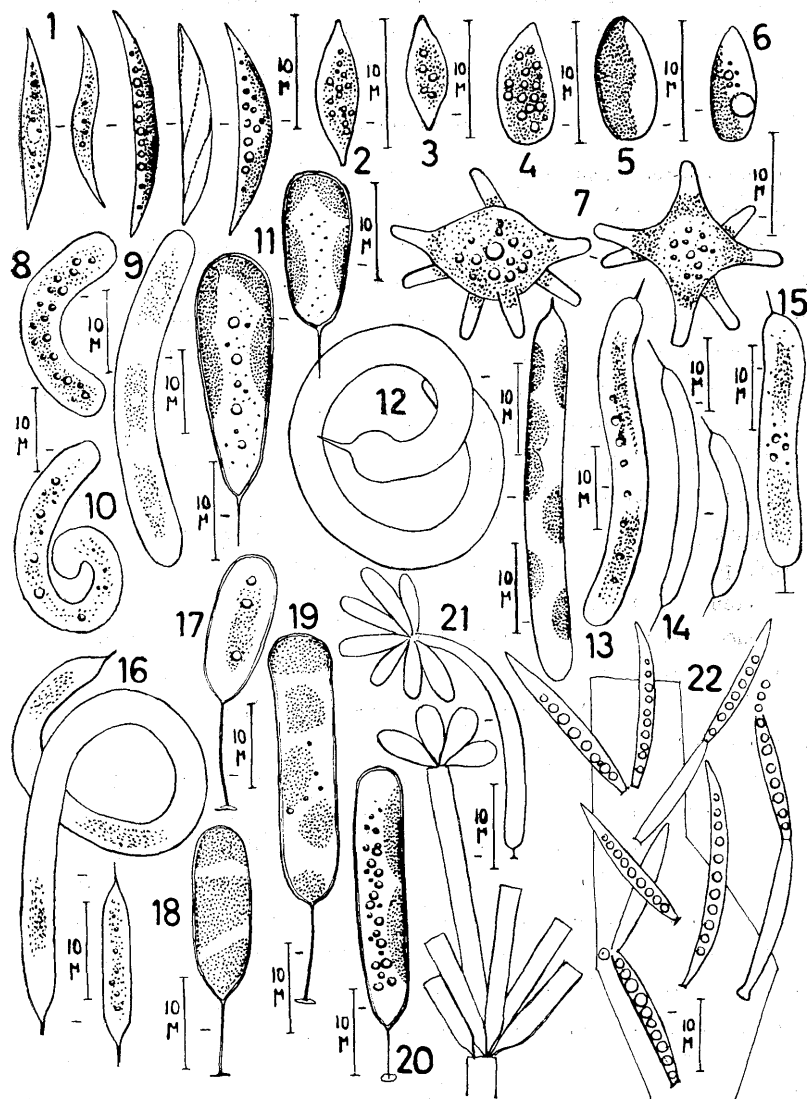


Fig. 1. *Chlorocloster nipponica* sp. nov. 2-3. *Chlor. salviniae* sp. nov. 4-6. *Monodus coccomyxa* Pasch. 7. *Polyedriella nasuta* sp. nov. 8-10. *Ophiocytium parvulum* A. Br. 11. *O. saubaulensis* sp. nov. 12. *O. cochleare* A. Br. 13. *O. aquae-pluvialis* sp. nov. 14. *O. yukiko* sp. nov. 15. *O. spinosum* sp. nov. 16. *O. capitatum* Wolle. 17-20. *O. fontinalis* sp. nov. 21. *O. arbuscula* (A. Br.) Rabenh. 22. *O. filiforme* sp. nov.

7. *Ophiocytium cochleare* A. Br. in D.H. p. 207, fig. 102-7-9. (Fig. 12)

Cells curved, 7-8 micr. broad with one end capitate and spinose. Hab. 5, 8.

8. *Ophiocytium aquae-pluvialis* sp. nov. (Fig. 13)

Cellula cylindrica, libere natantes,  $36-56 \times 6-7$  micr., asymmetrica, curvata vel S-formis, apicibus rotundatis, una cum spina recta 4 micr. lg. ornata; membrana tenuissima et brunnea; chromatophoris 2 laminatis, longis, viridio-flavescens sine pyrenoide; granulis olei rubri-fuscis adsunt. Hab. 6.

9. *Ophiocytium yumiko* sp. nov. (Fig. 14)

Cellula  $30-44 \times 3.7-4$  micr., solitaria et natantes, cylindrica plusminus curvata cum apicibus rotundatis et spinosis, spinis 5-6 micr. lg.; chromatophores viridio-flavescens. Dedicavi hanc species in honorem Dom. Prof. Yumiko Ugadim, algologo, Universit. S. Paulo, Brasil. Hab. 6.

10. *Ophiocytium spinosum* sp. nov. (Fig. 15)

Cellula ad substratum affixa, longa cylindrica plusminus curvata,  $50 \times 7.5$  micr., apicibus rotundatis, una cum spinis, cetera cum pedice affixa; chromatophoris 2 laminatis ab utroque latere cellulis positum, dilute viridicoeruleis sine pyrenoide; membrana dilute brunnea; granulis olei atro-rubris centralis. Hab. 8.

11. *Ophiocytium capitatum* Wolle in D.H. p. 209, fig. 105, 1-9. (Fig. 16)

Cells single, straight or spiral, 6-7.4 micr. broad with short end spines; chromatophores several, green-yellow. Hab. 9.

12. *Ophiocytium fontinalis* sp. nov. (Figs. 17-20)

Cellulae singulae ad substratum affixae,  $10-31 \times 4-7$  micr., stipulis 3-5-10 micr. lg. cum pede cylindrico; apicibus plusminus rotundatis; membrana brunnea; chromatophoris 1-8 dilute viridis vel viridio-flavescens, periphericis; granulis olei atro-rubris numerosis. Hab. 8.

13. *Ophiocytium arbuscula* (A. Br.) Rabenh. in D.H. p. 209, fig. 108. (Fig. 21)

Cells form colonies. Hab. 3.

14. *Ophiocytium filiforme* sp. nov. (Fig. 22)

Cellula filiformis vel elongato-fusiformis, rectae vel curvatae, vel parte posteriore plusminus undulatis,  $37-66-74 \times 5.5-6$  micr., parte posteriore attenuatis fere acutis, affixa ad substratum, sine stipule cum pede minuta et brunnea; parte anteriore cum cellula filialis singulis vel 2-3 in numero filamentis formantes; cellulae matricalia et filialia similaribus; chromatophoris

vel zoosporis granulatis, viridio-flavescens; zoosporis stigmatibus, flagellis non vidi; granulis olei adsunt. Hab. 10.

### Literatures

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日本および南米ブラジル São Paulo で採集した黄緑藻 (Xanthophyta) に属する 4 属 14 種の記載を発表した。そのうち、9 新種があり、また新潟市付近のサンショウモ (*Salvinia natans*) の生育する水溜りから得られた *Chlorocloster nipponica* sp. nov., *C. salviniae* sp. nov., *Monodus coccomyxa* Pascher が含まれて居る。

○高等植物分布資料 (65) Materials for the distribution of vascular plants in Japan (65)

○ギョクシンカ *Tarenna gyokushinkwa* ohwi. 本種は台湾から沖縄諸島・奄美諸島・九州まで分布し、北九州では長崎県のみ自生地が知られていたが、筆者は佐賀県東松浦郡呼子町加部島で採集した。いわゆる九州西まわり分布を示し、北限は長崎県壱岐島である。尚、標本は馬場胤義氏に御確認いただいた。

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